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The veterinarian's role in grief and bereavement at pet loss

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One of the measures of the strength of the human/companion animal bond is the grief--often intense--that an owner feels at the death of a pet. In bringing a cat (or any other animal) into the household, the activities of caring for it, playing with it, loving it, and tending it when it is sick, all cement a relationship which is beneficial and pleasurable to both pet and owner. These same loving acts set the stage for pain and sorrow when the pet dies. It has been said that grief is perhaps the price we pay for love, the cost of commitment¹.

Mourning and grief at the anticipation of and at the time of death of a pet is a normal human reaction. Because the whole topic is charged with emotion for both owner and veterinarian, the dynamics of grief should be well understood to provide the best possible service to the client in his or her time of need.

Grief can be briefly described as the process in which the bereaved move from denial toward acceptance of loss. It is a normal process with various overlapping stages, and in which people move forward and regress; it is a process which takes time.

Dr. Elisabeth Kubler-Ross in her seminal work On Death and Dying² differentiated five classic stages the dying travel through: denial and isolation, anger,

bargaining, depression, and acceptance. Others have since focused their work on those close to the dying--the bereaved--and have defined the stages the mourners pass through on being faced with the death of a loved one. Even with each writer's modifications and different points of view these stages are quite similar to those that face the dying.

The death of a pet affects the owner in a manner proportional to the degree of the owner's attachment to the pet. It certainly is a loss and depending on the circumstances of the loss there may be numbness, shock, denial, anger, guilt, depression, and acceptance. All these are the same elements of grief for a human loved one. There are, however, important differences in grief for a human and grief for a pet that we should be aware of.

The following comparison is based on a paper presented at the International Conference on the Human/Companion Animal Bond in Philadelphia in 1981.³

In a terminal case, preparation for the human's or pet's death can be made through discussions with the physician and patient or with the veterinarian. Responsibility for decisions on the method of treatment and hospitalization of a person is primarily on the physician. Concerning the pet, all responsibility regarding the decision to treat or discontinue treatment

is on the owner. The option of euthanasia for a pet is one of the fundamental differences in the grief process for humans and pets. It can be either a great help or an added stress; owners may feel they can relieve the suffering of their cat (something they cannot do for a relative), or they may feel they are being asked to consider murdering their cat. Suddenly there are many decisions to make: when, where, by whom, and should they be present. At the death of a pet, owners may experience numbness and shock, but generally it is not the "earth stopper" reaction that many people have to loss of a human loved one. Disturbance of normal activities and pangs of grief may occur while grieving for a pet but, relatively speaking, they do not usually last very long.

Another large difference in grief for humans and pets is the support system available to the bereaved. With the death of a close friend or relative, it is expected the bereaved will not be able to carry on with normal activities for a time and help is forthcoming in the form of sympathy and offers of help from friends and family. With the death of a pet, the owner may not find sympathy from friends and family, but in fact may encounter

impatience and ridicule of his or her emotions. Well-meaning but insensitive people may have the attitude, "After all, it is only a cat..." As a result, the client may feel abnormal, "weird," and even more alone. In fact, the only sympathy the owner may sense may come from the veterinarian and his or her staff.

The owner is faced with the decision of what to do with the body often immediately upon hearing of the pet's death, whereas for a human death, religious traditions and culture usually do not require immediate decision-making. Funerals and discussion of philosophy of life may be helpful to those grieving for a pet, especially children. Comfort can be offered by pointing out that the older cat had a good life and that there is now an end to its suffering.

As stated, anger is a normal stage to be expected in the sequence of grief. Anger may be directed toward the veterinarian, other people or even other animals. Guilt is another factor. With the death of a relative, guilt may center on missed opportunities and perhaps a feeling of partial responsibility for the death. Guilt arising from a pet's death may come from a similar sense of responsibility, or in wondering if the right decisions were made. The cost of treatment and the effect of these expenses on the family is never a determining factor in the case of an ill family member because there is no question whether treatment will be carried out; however, money is a large factor in the decision of whether or not to treat or continue treatment of a pet. Therefore, the ability to pay is a significant part of the anguish of pet owners.

Each client's reaction to news of a terminal disease is a very individual matter and veterinarians react to clients according to their individual personalities. With a little experience the veterinarian will be able to "read" clients and can respond to their demonstrated needs. Many different circumstances and situations lead up to the death of a pet, each eliciting a different response from client and veterinarian. So

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with the three factors--circumstances, client and veterinarian--each responding interdependently with the other, every situation is quite different.

Pet owners, clinicians, and the available literature offer valuable opinions on the role of the veterinarian at the end of a pet's life. Underlying this entire discussion are two essential ideas. First, it cannot be overstated that grieving is a normal process which must occur so as to put the death of a pet in its proper perspective in the life of the client. It is all right to grieve. Second, probably the best thing the veterinarian can do is to take the time to show compassion in whatever ways he or she feels comfortable. It is important to be honest and sincere, for clients will instantly recognize any insincerity or ridicule in the tone of voice, and the whole purpose, to help the client, will have been defeated.

The client will probably begin the grieving process upon hearing the news of impending death. He may be so shocked he does not really hear what is being said and it may be necessary to repeat an explanation several times. If the diagnosis is a malignant neoplasia it is important to use the word cancer at some point, as clients may not understand other terms. Cancer conveys a special horror to many people and a diagnosis of cancer in itself may influence their decisions. However, many times cancer is a treatable disease and the cancer patient lives longer (even without treatment) than the patient with a metabolic disease such as congestive heart failure or renal failure. Some clients may not want to or are unable to make the decisions about treatment and wish the veterinarian would make them. Others are glad for the chance to make decisions, for they can in a sense "control" what is happening to their cat and have a part in its treatment. Still others may start feeling guilty right away. If only they had brought the cat in a few weeks sooner when the signs started, treatment might have saved the cat. It will only add to the client's guilt to imply negligence on his or her part by not having the pet seen or neglecting some treatment. For still

others, the expenses involved may be prohibitive and, being practical, they may be sad but they can make the decision to euthanize their pet and complete the grieving process relatively quickly.

The option of euthanasia is both a boon and a burden to clients and veterinarians. It can provide the opportunity to the client to end the suffering and bring a peaceful end, but the decision to do so may come hard. If the client is looking for a basis to decide when and if to euthanize, we can ask if the cat is able to perform as it used to, such as coming to the door when the owner comes home, or being playful. If not, perhaps the cat is no longer happy. Many people need time to make the decision for euthanasia. They need to go home to think and to have a family discussion. They may call again with more questions. For many diseases, especially cancer, whether the decision to treat or euthanize is made now or in two or three days makes very little difference.

For those who feel that euthanasia is really just a euphemism for killing their pet, it will not be an option. The client will make it quite clear that he or she does not want any mention of euthanasia. It becomes a hard situation for the veterinarian who feels the animal is really suffering, but the owners wish to see the pet die naturally. The veterinarian can try to discover the owners' reasons for this and work with them.

One study⁴ showed that all adults were very concerned with the manner of the death of their pet. It may help the client in making the decision for euthanasia to explain how it is done, what the animal feels. Some clients may wish to be with the cats; others will not. If the cat is at home and the owners decide to bring it in for euthanasia, the visit will be emotionally charged for everyone. It may be best to schedule these visits out of office hours so clients do not have to sit in the waiting room any length of time, the paperwork can be minimized, and

(Cont. on page 6.)

Ethylene glycol intoxication in the cat

Paul R. Black, D.V.M.

Ethylene glycol intoxication is common among domestic animals and has been reported in the dog, cat, pig, poultry, calf, and man. Commercial antifreeze, which contains a minimum of 95% ethylene glycol, is the most common source of intoxication. Photographic developing fluid, certain plants, detergents, polishes, and cosmetics also contain ethylene glycol.

Although poisonings in animals occur most frequently during the fall months when automobile radiator fluid is changed, they often occur in the spring, when cars are being repaired. In fact, poisonings are reported year round. The ethylene glycol imparts a sweet or semi-sweet taste to the antifreeze which apparently attracts animals to consume it.

Ethylene glycol itself is not toxic; its intermediary oxidation products are the active toxic principles. Ethylene glycol is oxidized in the liver, and the rate limiting step of the reaction pathway is catalyzed by alcohol dehydrogenase (Fig. 1). The three main toxic compounds in the pathway are glyoxylate, glycoaldehyde, and glycolate. These metabolites produce a severe metabolic acidosis and have a direct cytotoxic effect on the renal tubular epithelium, either of which may be the cause of death in fatally poisoned animals.

Glyoxylate, one of the toxic intermediary products, is further oxidized to formic acid and carbon dioxide, glycine and oxalate. The formation of oxalic acid accounts for only 2 to 3 percent of the metabolism of ethylene glycol. Oxalic acid complexes with calcium ion to form calcium oxalate crystals. Oxalate crystal production is greater in the cat than other species. These crystals may precipitate out in several tissues of the body, especially in the renal tubules, adding to the ongoing tubular epithelial destruction by mechanical blockage and secondary renal edema which compromises renal blood flow.

Although the finding of calcium oxalate crystals in the urine or in renal biopsies is of diagnostic value, the crystals are of little pathophysiological significance.

The toxicity of ethylene glycol varies between species. The cat is the most susceptible to poisoning. The lethal dose in the cat is 1.5 ml/kg of body weight, while in man and the dog it is 1.6 ml/kg and 6.6 ml/kg, respectively. Ethylene glycol is rapidly absorbed from the gastrointestinal tract and reaches peak blood concentrations in 1 to 3 hours post-ingestion.

There are 3 syndromes associated with

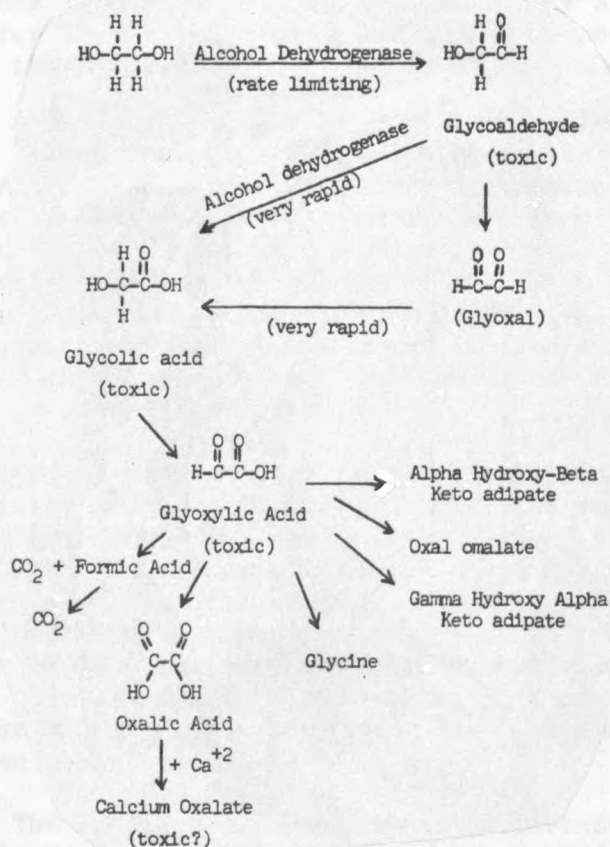


Fig. 1. Pathway of Ethylene Glycol Hepatic Oxidation. (Modified from Beasley and Buck; see references.)

ethylene glycol intoxication. If a massive dose is consumed signs will be peracute in onset and include severe depression, metabolic acidosis, coma, cardiopulmonary collapse and death in less than 12 hours. If a smaller dose is consumed signs will appear 1 to 6 hours after ingestion. The initial signs are due to a direct effect of ethylene glycol on the central nervous system resulting in weakness, depression, confusion, vomiting, muscular incoordination and ataxia similar to a state of inebriation in man.

As ethylene glycol undergoes hepatic biotransformation, signs progress to loss of reflexes, diarrhea, convulsions, coma and death within 48 hours. Clinical pathology findings include metabolic acidosis, azotemia, possible hypocalcemia, hyperosmolemia, hyperkalemia, and hyperphosphatemia. It is unknown whether the convulsions are due to a direct effect of ethylene glycol on the central nervous system, hypocalcemia secondary to calcium oxalate formation, or uremia secondary to toxic tubular nephrosis. Oxalate crystaluria or production of coffee-colored urine may occur during the early acute stage, but these do not always occur. If the amount ingested is small and the cat survives the acute stage of intoxication, a chronic form of poisoning characterized by acute renal failure and uremia will ensue in 1 to 3 days, usually culminating in death after several days.

There are 3 main objectives in the treatment of ethylene glycol intoxication. First, reduce the load of ethylene glycol substrate in the body and reverse the metabolic acidosis produced by the formation of glycolic acid. This is accomplished by stomach lavage using activated charcoal, intensive diuresis and sodium bicarbonate therapy to encourage the excretion of unmetabolized ethylene glycol in the urine, and peritoneal or hemodialysis when needed and economically feasible.

Second, prevent the formation of calcium oxalate crystals in the body by inducing diuresis and administering sodium bicarbonate to alkalinize the urine.

Third and most crucial is to block the oxidation of ethylene glycol. This is most rationally accomplished at the rate limiting step by inhibition of alcohol dehydrogenase. Numerous antidotes have been tried for the treatment of ethylene glycol intoxication. The preferred treatment is to utilize a 20% solution of pure ethanol and 5% sodium bicarbonate intravenously until the animal is comatose, and maintain the animal in this state for 3 days. Alternatively, boluses of ethanol and bicarbonate may be given intravenously or intraperitoneally every 6 to 8 hours. The regimen in the cat calls for 5 ml/kg of 20% ethanol and 6 ml/kg of 5% sodium bicarbonate to be given every 6 hours for 5 treatments, and then every 8 hours for 4 treatments. This allows reassessment of the cat between treatments to formulate an accurate prognosis. The use of propylene glycol or 1,3 butanediol as an antidote looks promising for the future. They are safer to use and are as effective or more so than ethanol.

Animals which are treated and survive an acute episode of poisoning enter a state of acute renal failure. Treatment for these animals includes intravenous fluids, antibiotics to prevent catheter sepsis, and the use of furosemide or mannitol as needed for oliguric or anuric cases. Monitoring of serum electrolytes and acid-base balance is required for proper long-term treatment.

The prognosis for any animal which ingests ethylene glycol is poor. In veterinary medicine one rarely knows the volume of the toxic compound ingested or the period of time since ingestion. The majority of poisoning cases are not presented for treatment until after the onset of clinical signs by which time peak blood levels of ethylene glycol have already been achieved.

The best treatment for "antifreeze" poisoning is prevention. This means education of clients and the general public to the hazards involved with disposal of old antifreeze and the improper storage of containers of antifreeze. The potential

Pet loss (Cont. from page 3.)

the veterinarian can be sure the client is comfortable with the decision.

It is a good idea before they witness euthanasia to explain what will happen. The occasional twitching or agonal gasp can be very upsetting to an unprepared client and can set the stage for unnecessary suffering and later anger toward the veterinarian. For those who do not wish to witness the procedure, an offer to view the body, now at peace, may be comforting. Clients may appreciate some time alone in the exam room with the pet to sit, think, and compose themselves before leaving the hospital. Special arrangements that may make the loss more bearable can be discussed, such as burial at home, cremation or pet cemeteries.

Again, it must be emphasized that grieving is a normal process and a sequence of responses that the client will go through whether the veterinarian sees it in the office or not. If a client is holding back, perhaps embarrassed about an emotional outburst, it is very much in order to say it is OK to cry, that it's

natural and normal, and that the client would be very unusual indeed if he or she did not feel any grief for the pet.

Clients who do not find sympathy or support in friends or family may call back at some point seeking reassurance and comfort. Other clients, whether demonstrative in their grief or not, may call back with more questions about the disease, looking for reassurance they did the right thing in euthanizing their pet.

Some people, after thinking about things for a few days, will call or write a letter to express frustration or anger ranging from "Why can't veterinary science do more" to "Why did this happen to me and my pet" to "You killed my cat" to the rare threats of bodily harm. If the veterinarian understands the inevitable grief process these clients are going through, he or she can remain objective and talk things out calmly. Although difficult, it is best not to take personal offense, and not to respond to anger with anger, as this never improves the situation.

If a veterinarian has good client relations he or she will on occasion receive letters from clients expressing thanks for bringing their pets back to health. Yet, the greater percentage of mail received will be to thank the veterinarian for help at the time of a pet's death. This would seem to indicate this is a time when the client is especially open to the actions and attitudes of the veterinarian. Some veterinarians send a letter or card to the client a few days after the death of the pet. Two or three lines expressing sympathy and, depending on the case, that euthanasia was a humane choice to end the cat's suffering, may bring a lot of comfort to the grieving client.

Replacement with another cat often helps to fill the gap left by loss. However, the time of death or euthanasia is not the appropriate time to mention this, for almost all owners will immediately respond, "I will never get another cat." Rather, an opportunity may present itself at some point during the course of treatment to discuss the pros and cons. The veterinarian can emphasize that the pet

Ethylene glycol (Cont. from page 5.)

for poisoning exists not only for cats and other animals, but for children as well.

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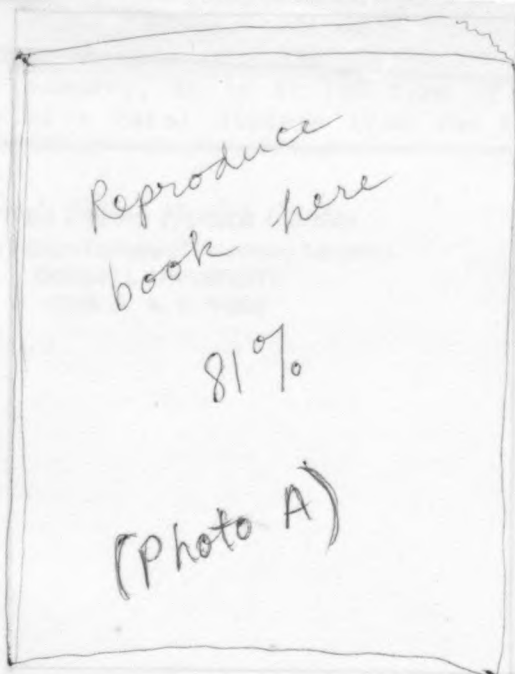
cannot be fully replaced--certainly not its unique characteristics--but there will be a pet to come home to at night, a cat that sits in the lap and purrs affectionately. Most people will not want to replace the pet right away but in one to four weeks they are ready to think about it.

Every client and every situation concerning the death of a pet is different but the elderly and children are clients that have special experiences. To an older person the pet has been a long-time companion; both are used to the ways of the other. The pet may hold a unique significance, bringing back memories of the spouse or an active, happier time. Anticipation of the death of their pet may bring into sharper focus feelings and anxieties about their own mortality. For some clients, especially if living alone, the pet may give a sense of being needed and wanted; there are certain responsibilities that must be carried out daily. Yet many elderly people seem to accept the death of their pet relatively easily. Certainly they go through the same grieving process others do, but it may not be

the overt or agitated grief the veterinarian may see with younger clients. For the frail client who lives alone, a telephone call a few days after the death of a pet is a good idea just to see how the client is doing, if he or she is eating and sleeping well. Perhaps an offer can be made to call a friend who can help the client to start up with life again.

Often the elderly will say they will never get another cat because they could not handle or train a rambunctious kitten. Another reason offered is that the cat will outlive them and who will take care of it after they die? One solution that could be suggested is that the client obtain a mature, already trained cat. While this may not be immediately appealing to the client, perhaps when he or she misses having a pet around the house the idea may sound better. Another possibility is a bird or fish, as these can provide much pleasure but do not require a lot of activity on the owner's part. A third possibility is to have people bring a pet for a visit for the afternoon or day. When such visits can be arranged it is wonderful for some clients, for it

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provides social contact, companionship and a focus for the day all without the responsibility of pet ownership. Replacement of the pet should be encouraged, as studies have shown that elderly or ill people who lose a pet will live longer if the human/companion animal bond is formed again with another pet.⁵

For a child, the death of an animal, be it a pet or wild animal, may be the first experience with death. Death raises many questions: who caused the death; did the child cause it by a misthought or misdeed; where does the body go; what happens to the soul? Children also go through the grief process and they need support from parents to help interpret their fears and fantasies. The experience will help the child to understand the meaning of death and will prepare his psychological defenses for the loss of important people later on in life. Children often express the wish to have a funeral for the cat and to bury it in an attempt to overcome their fears and understand their emotions. A pet should be replaced, but not too quickly, for the child may feel he is betraying the former pet. Yet, by replacing the pet, the child sees on one level that certain aspects of the bond can be renewed, and on another level that life goes on. A beautiful little book about the death of a child's cat, The Tenth Good Thing About Barney,⁶ may help parents and children in this troubled period.

In summary, it is at the time of diagnosis of a fatal disease that the client

begins to grieve. This grief can be intense, reaching another peak at the actual death of the pet. The grief a client feels for his pet is real, normal, and necessary, going through phases similar to the grief for a human loved one, with certain important differences. Veterinarians can be of most help to their clients by giving of their time and compassion to both client and animal in whatever manner their sensitivity indicates.

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